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09/918,163

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Sunghyun Choi

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c/o PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
Corporate Intellectual Property
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EXAMINER

CHUNG, PHUNG M

ART UNIT

PAPER NUMBER

2138

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,163

Applicant(s)

CHOI, SUNGHYUN

Examiner

Phung My Chung

Art Unit

2138

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 8, 11-12, 15-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (6,145,109).

As per claims 1 and 6, Schuster et al disclose a method for enabling recovery of lost payload blocks, the method comprising the steps of:

a) transmitting a sequence of packets from a source node to a destination node, each packet in the sequence including a sequence identifier and having a plurality of payload blocks;

b) determining whether at least one of the plurality of the payload blocks within a particular packet is lost in the transmission;

c) storing other payload blocks that are successfully received within the particular packet in a storage medium for subsequent retrieval;

d) recovering the lost payload block; and

e) combining the stored payload blocks only with the lost payload block of a retransmitted packet in sequential order for form a complete packet. (See col. 7, lines 15-67). Schuster et al do not disclose subsequently transmitting a request for retransmission of the particular packet containing the lost payload blocks to the source node, as identified by the sequence identifier. However, in the background art of

Schuster et al, disclose request for retransmission of any lost packets. Therefore, it would have been obvious design choice to a person of ordinary skill in the art, at the time the invention was made, to request retransmission of any lost packet to recover the lost packet (col. 3, lines 15-21) or to recover any lost packet without request retransmission and without introducing significant delay into the transmission process by error correction (col. 2, lines 21-27, col. 3, lines 26-33 and col. 4, lines 42-44).

As per claims 2-3, Schuster et al further disclose the step of monitoring link quality associated with the at least one of the plurality of the payload blocks and identifying erroneously received payload blocks during the transmission (col. 7, lines 27-44).

As per claim 4, Schuster et al further disclose the step of performing error correction to recover the lost payload blocks (col. 2, lines 21-27).

As per claims 8, 15-16 and 20, these claims are rejected under similar rationale as set forth in claims 1 and 6.

As per claim 11, Schuster et al further disclose wherein encoded signals include employing a Reed-Solomon block coder (col. 5, lines 29-30).

As per claim 12, this claim is rejected similar rationale as set forth in claim 4.

3. Claims 5, 7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (6,145,109) as applied to claims 1, 6, 8, 15-16 and 20 above, and further in view of Raitola et al (6,289,003).

As per claims 5, 7 and 13 the teaching of Schuster et al had been discussed above. They do not disclose wherein the step d) further comprises the steps of:

Determining whether the payload block corresponding to the lost payload from the subsequent transmission is received successfully;

If yes, performing the step e); and

If no, requesting for retransmission of the particular packet containing the lost payload block again. However, Raitola et al disclose wherein the step d) further comprises the steps of:

Determining whether the payload block corresponding to the lost payload from the subsequent transmission is received successfully;

If yes, performing the step e); and

If no, requesting for retransmission of the particular packet containing the lost payload block again. (See Fig. 2, col. 11, lines 36-42). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the steps of determining whether the payload block corresponding to the lost payload from the subsequent transmission is received successfully;

If yes, performing the step e); and

If no, requesting for retransmission of the particular packet containing the lost payload block again as taught by Raitola et al into the lost payload block of Schuster et al. The advantage is that it is possible to retransmit and combine transmission units of poor quality before detection.

As per claim 14, this claim is rejected similar rationale as set forth in

claim 7.

4. Claims 9 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (6,145,109) in view of Younge, III et al (6.522,650).

As per claim 9, the teaching of Schuster et al had been discussed above. They do not disclose the step of demodulating the encode signals...to generate the plurality of the decoded frame. However, Younge, III et al disclose a demodulator (66) for demodulate the encode signals in accordance with a particular demodulation format to generate the plurality of the decoded frame (col. 7, lines 10-21). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the a demodulator (66) as taught by Younge, III et al into the decoder of Schuster et al for demodulate the encode signals in accordance with a particular demodulation format to generate the plurality of the decoded frame.

As per claim 17, Schuster et al disclose a system with various element for carrying out substantially the same steps as describe in claim 1 or 8. Schuster et al do not disclose a demodulator configured to receive and demodulate a modulated signal and a decoder operatively coupled to the demodulator for decoding the demodulated packets. However, Younge, III et al disclose disclose a demodulator (66) configured to receive and demodulate a modulated signal and a decoder (68) operatively coupled to the demodulator for decoding the demodulated packets. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the demodulator and the decoder coupled to the demodulator as taught by Younge, III et al into the decoder of Schuster et al so that the demodulator can be

configured to receive and demodulate the modulated signal and the decoder operatively coupled to the demodulator for decoding the demodulated packets.

As per claim 18, this claim is rejected under similar rationale as set forth in Claims 4 and 12.

5. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (6,145,109) and Younge, III et al as applied to claims 9 and 17 above, and further in view of Zehavi (2005/0083878).

As per claim 10, the teaching of Schuster et al and Younge, III et al had been discussed above. They do not specifically disclose wherein the demodulation format is specified by the IEEE 802.11 standard. However, Zehavi discloses wherein the demodulation format is specified by the IEEE 802.11 standard (paragraphs (0057)-(0058)). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the demodulation format is specified by the IEEE 802.11 standard for high-speed data transmission.

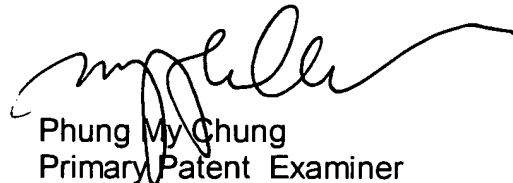
As per claim 19, this claim is rejected under similar rationale as set forth in claim 10.

6. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 571-272-3818. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phung My Chung
Primary Patent Examiner
Art Unit 2138